Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

WRITTEN COMMUNICATIONS.

Letters were read from Wm. G. Lettsom, Esq., dated Washington, June 2, 1843, and from J. G. Norwood, M. D., dated Madison, Indiana, May 23, 1843, severally acknowledging the receipt of their notices of election as Correspondents of the Academy.

Also a communication from the Perpetual Secretary of the Imperial Academy of Sciences of Russia, dated St. Petersburg, 16th March, 1843, in acknowledgment of the receipt of the Proceedings and other Publications of the Aca demy.

STATED MEETING, JUNE 20, 1843.

VICE PRESIDENT MORTON in the Chair.

DONATIONS TO MUSEUM.

Very large and fine specimen of Conus papilionaceus, from Liberia. Presented by Mr. Cassin.

Specimen of Scutella pentaphora, from Great Egg Harbor; twenty-five species of Insects, (family Libellulidæ,) from the vicinity of Philadelphia; and a specimen of Elater nocticulus, from the West Indies. From Mr. Charles C. Ashmead.

DONATIONS TO LIBRARY.

Reports of the Council and Auditors of the Zoological Society of London, with portions of the proceedings of the same for 1842. From the Society.

Address delivered at the anniversary meeting of the Geological Society of London, on 17th February, 1843, prefaced by the announcement of the award of two Wollaston Medals, and the Donation Fund for the same year. By Roderick Impey Murchison, F. R. S., &c. London, 1843. From the Author.

On the distribution and classification of the older or palæozic deposits of the North of Germany and Belgium, and on their comparison with formations of the same age in the British Isles By the Rev. Adam Sedgewick, F. R. S., F. G. S., &c., and Roderick Impey Murchison, F. R. S., F. G. S., &c. 4to. Accompanied by a 4to. volume of engravings illustrative of the text. London, 1842. From the Authors.

Manuscript Lectures on various subjects of Natural History and Natural Philosophy. By Redmond Conyngham, of Lancaster county, Pennsylvania. From the Author.

WRITTEN COMMUNICATIONS.

A letter was read from the Secretary of the Zoological Society of London, acknowledging the receipt of the Proceedings of the Academy.

VERBAL COMMUNICATIONS.

Dr. Morton, (upon resigning the chair to Dr. Goddard,) communicated some interesting information respecting the Cicada septemdecim, or seventeen year locust, which, during a recent journey from Rahway to Haddonfield, in the State of New Jersey, he had observed in very great numbers. They made their appearance there three or four weeks since, and were chiefly to be found in the tract of country lying between the two places mentioned, not exceeding fifty miles in extent. In one apple orchard the trees were literally loaded with them; some trees Dr. M. supposed to contain not less than two thousand. The foliage or other vegetation, so far as his observation extended, had as yet sustained no perceptible injury from them; and naturalists were still undecided with regard to the kind or source of sustenance preferred by the insect during the time it remains above the surface.

Dr. Morton referred to the minutes of a former year, 1834, when this insect had appeared in the city and its vicinity, for a record of interesting information on the subject, which, at his request, was read by the Secretary.

[The following extracts from the minutes alluded to have not been published at any previous period, and are presented at this time, chiefly with the view of calling the attention of members and others to the subject, and of inducing farther investigation.

At the meeting of June 3d, 1834, Dr. Harlan stated that on the 25th of May last he had observed the Cicada septemdecim in such large numbers as to blacken a field of wheat in the vicinity of the city: they were also very numerous in some of the public squares. It was his belief that the insect increased somewhat in size while it remained; and also, that nothing was known respecting its food. Upon dissection, mere rudiments of the organs of digestion were found.

Mr. Rogers, on the contrary, stated that in 1817, the trees in the neighborhood of Baltimore had been stripped of their leaves by this insect. He also expressed some doubt as to their common origin, from the fact of their periodical return not being necessarily in the same year in different parts of the country, and that this was probably owing to geological causes.

Dr. Keagy had seen them in 1815 in the Valley of the Mississippi; in 1817 near Baltimore, and in 1832 in Westmoreland county, Pennsylvania; Dr. R. Coates in 1818, in Burlington county, New Jersey; Mr. Gibbons in 1825, near Moorestown, New Jersey, and in 1827 in the Eastern part of Virginia; Mr. Johnson in 1831, near Rochester, New York; and Dr. Morton in 1817, in Westchester county, New York.

Dr. Coates had seen a tree in Germantown nearly destroyed, in 1817, by the deposition of the ova of the insect.

Dr. Pickering stated that this Cicada had not yet been met with in the Eastern part of New England, but that a rare species of Cicada had been found nearly resembling the C. septemdecim, and which might be easily confounded with it; the latter differed, however, in the abdomen being all black: in the former, the rings of the abdomen have each a red border; they were usually found in rocky soil.

At the subsequent meeting, Mr. Gibbons read an extract of a letter from his brother on the subject of the Cicada septemdecim, in which the writer stated that he had seen them feeding on the sweet gum, by pushing the proboscis into the bark; when this organ was withdrawn a drop of fluid appeared at the aperture, which served for food to some ants.

Dr. Mütter exhibited a dissection of the singing apparatus of the Cicada septemdecim, consisting of the diaphragm and an air cell and sounding board on each side, and a pair of muscles. The whole is distinct from the abdominal cavity. The proboscis was hollow, and intestines convoluted, without perceptible œsophagus or stomach.

Mr. Lukens mentioned that with Mr. T. R. Peale he had seen the Cicada septemdecim feeding, by pushing the proboscis into the bark of trees, particularly young beech trees.

At the meeting on the 1st July, Dr. McEuen (then Recording Secretary) stated that the C. septemdecim had disappeared from some places in the vicinity of the city since the occurrence of a heavy rain: he also exhibited the young branches of trees in which the ova of the insect had been deposited in punctures in longitudinal lines, many in one perforation. The young branches had been thereby for the most part destroyed.

Dr. Ruschenberger, at the meeting of July 8th, observed that in travelling from Baltimore to Frederick, Maryland, he had found the C. septemdecim abundant at the two places mentioned, whilst none were seen in Montgomery county, between Baltimore and Washington.]

After the above extracts had been read, Prof. Rogers made some remarks on the subject, chiefly confirmatory of the opinion expressed by him in 1834, of the periodical return of the insect being influenced by geological causes.

Dr. Goddard referred to the well known fact of the C. septemdecim being occasionally found in a living state at a great distance below the surface. When so discovered, its head its usually downward. According to the published statements of a recent observer, Mr. Ehrenberg, of Berlin, minute infusoria may be found at a great depth in the earth, and authorising the conjecture which Dr. G. offered, that these infusoria afforded sustenance to the insect during its long absence. He expressed his belief that no satisfactory reason had as yet been given for its reappearance at regular periods.

As another fact, not probably known to the members generally, he mentioned that the yolk of eggs brought from the district of New Jersey at present visited by the insect, had lost, in a great measure, their yellow color. This had been observed in former years, and was supposed by the farmers to be caused by the fowls feeding on the insect.

Mr. Gliddon stated that in Lycoming county, in this State, whence he had recently returned, the insect had been very numerous, but at the time of his visit had nearly disappeared. The stomachs of some trout which he had caught there were found to be gorged with it.

Mr. Cassin had been informed that the C. septemdecim was now very abundant in other counties of the State, particularly near Mauch Chunk. He also stated that the irregularity in the time of the appearance of the insect had been supposed to be owing to the overlapping of adjoining districts; as an example of which Loudon county, Virginia, was mentioned, where it appears at intervals of eight and nine years alternately. Although, as regards this locality, and perhaps some others, this hypothesis may be correct, it will not apply to all cases. In 1834, the C. septemdecim appeared in the neighborhood of Philadelphia and in the adjoining counties, and again in small quantities in Chester county, in 1836.

Mr. Cassin expressed the opinion that there are two varieties of the C. septemdecim, the larger and smaller, both of which appeared in this vicinity in 1834; they differ in size, and also in their note. The larger is the one commonly known as the seventeen year locust.

Dr. Goddard then called the attention of the members to a plan which he had recently adopted for removing a disease, common and very fatal to newly fledged chicks, and familiarly known as "the gapes," and which he considered of importance to be known by agriculturalists.

Upon opening the trachea of a chick laboring under the disease, he discovered there a parasitic worm, which obstructed respiration, and occasioned inflammation of the part. By injecting into the trachea a small quantity of a mixture of equal parts of spirit of turpentine and olive oil, he succeeded in destroying the worm, and removing all the symptoms, and in every instance saving the life of the chick.

MEETING FOR BUSINESS.

JUNE 27, 1843.

VICE PRESIDENT MORTON in the Chair.

Several Reports having been received, and private business transacted, the Society proceeded to ballot for Members and Correspondents. The following gentlemen were elected.

MEMBERS.

Charles R. King, M. D., of Philadelphia.
Josiah Curtis, M. D., of Philadelphia.

CORRESPONDENTS.

Professor Joseph Henry, of Princeton College, New Jersey.
John L. Stephens, Esq., of New York.
Benjamin M. Norman, Esq., of New Orleans.
Isaac G. Strain, Esq., U. S. Navy.